

11. Vincent

corrected

Program Name: Vincent.java**Input File: vincent.dat**

Vincent was born on April 19, 2002 at 5:45 AM. Recently he has been thinking what the new date and time would be after a certain number of minutes had elapsed since that original time. For example, it was easy for him to think about a relatively small number of minutes, like 60 or 420 or even 1440 minutes later, in essence an hour, seven hours and 24 hours later.

He decided to represent his birth data as follows, and then list the number of elapsed minutes on the next line, like this:

```
2002 4 19 5 45
60 420 1440
```

He also decided on the date/time output format shown below to represent his birth date, followed by the other dates and times he thought about:

```
April 19, 2002 - 05:45 AM
-----
April 19, 2002 - 06:45 AM
April 19, 2002 - 12:45 PM
April 20, 2002 - 05:45 AM
```

He needs your help to write a program that will do this, given any starting date and time, followed by any number of minute values representing number of minutes elapsed from then. **Be sure to account for any leap year situations.**

Input: Several sets of data, each set occupying two lines, the first of which is the original date/time in the format:

yyyy mm dd hh mm

followed by a second line with several integer values, single space separation, representing elapsed minutes since the original time. He didn't consider any year before 1970 in his test data, represented hours in the range 0-23, and minutes from 0-59. The month and day numbers matched the date intended, with months ranging from 1-12, and day numbers ranging according to that month.

Output: The original date formatted as shown in the example above, followed on the next line by "-----", and then on the next several lines by the dates and times that represent the elapsed minute values in the second data line, ending with "=====" to end the output for that data set.

Sample input:

```
2002 4 19 5 45
60 420 1440 380 1095 4621
1990 8 6 17 39
2526861 81741 2368706 48621
```

```
April 20, 2002 - 05:45 AM
```

```
April 19, 2002 - 12:05 PM
```

```
April 20, 2002 - 12:00 AM
```

```
April 22, 2002 - 10:46 AM
```

```
=====
```

```
August 06, 1990 - 05:39 PM
```

```
-----
```

```
May 27, 1995 - 12:00 PM
```

```
October 02, 1990 - 12:00 PM
```

```
February 06, 1995 - 03:05 PM
```

```
September 09, 1990 - 12:00 PM
```

```
=====
```

Sample output:

```
April 19, 2002 - 05:45 AM
-----
```

```
April 19, 2002 - 06:45 AM
```

```
April 19, 2002 - 12:45 AM
```